

Appendix 1.2 Controlled Vocabulary for Abbreviated “Forcing” Descriptors

The abbreviations in this table can be used to describe the different externally imposed forcing agents that are active in a given simulation. A forcing agent will show some secular variation due to prescribed changes in concentration or emissions (or in the case of land-use, and change in prescription of surface conditions). Sometimes the change will be due to emissions of a precursor species that relatively quickly becomes transformed into the forcing agent itself (e.g., transformation of SO₂ emissions to sulfate aerosols). **In CMIP5 output files these abbreviations are used in defining the global attribute named “forcing”.**)

Abbrev.	Forcing Description	Abbrev.	Forcing Description
Nat	natural forcing (a combination, not explicitly defined here, that might include, for example, solar and volcanic)	LU	land-use change
Ant	anthropogenic forcing (a mixture, not explicitly defined here, that might include, for example, well-mixed greenhouse gases, aerosols, ozone, and land-use changes).	SI	solar irradiance (note: SI is “S” followed by a lower case “L”, not an upper case “I”)
GHG	well-mixed greenhouse gases (a mixture, not explicitly defined here)	VI	volcanic aerosol (note: VI is “V” followed by a lower case “L”, not an upper case “I”)
SD	anthropogenic sulfate aerosol, accounting only for direct effects	SS	sea salt
SI	anthropogenic sulfate aerosol, accounting only for indirect effects	Ds	Dust
SA (= SD + SI)	anthropogenic sulfate aerosol direct and indirect effects	BC	black carbon
TO	tropospheric ozone	MD	mineral dust
SO	stratospheric ozone	OC	organic carbon
Oz (= TO + SO)	ozone (= tropospheric and stratospheric ozone)	AA	anthropogenic aerosols (a mixture of aerosols, not explicitly defined here)